



Power, Speed, Lethality



The B-1 is a vital part of America's long-range bomber force, providing massive and rapid delivery of precision and nonprecision weapons against any potential enemy. Senior Airman Philip Knight (left) directs Airman David Ryals as they unload a 2,000-pound joint direct attack munition from a weapons trailer for upload into a waiting B-1. Both airmen are weapons loaders with the 77th Bomb Squadron at Ellsworth Air Force Base, S.D.



The B-1 Lancer is an aerodynamic marvel that brings patience and accuracy to the war on terrorism

by Maj. Una Cuffy

photos by Master Sgt. Dave Nolan

The B-1 Lancer isn't just another aircraft. Because for all its sleek good looks, it's a heavy bomber that can go a long way to put bombs on target.

The swept-wing bomber delivers — capable of flying from stateside bases to targets half a world away or launching from forward operating locations for extended engagements. It has proven its worth over Afghanistan where it has been one of the Air Force workhorses.

Its accurate bomb runs are part of the reason the Taliban and al Qaeda no longer rule there.

Air Force records show Lancers dropped nearly 40 percent of all bombs in the war on terrorism. And they did that while only flying 5 percent of the missions over Afghanistan.



One of the biggest assets of the B-1 is the commitments by the maintainers and the fliers, said maintenance specialist Staff Sgt. Ruben Bonales. That dedication regularly shows on the flight line, as Ryals (right) carefully positions a 2,000-pound JDAM under the fuselage of a B-1 with help from fellow 77th Bomb Squadron weapons loader Staff Sgt. Rick Riffe.

"You can't compare the firepower the B-1 brings to the fight," Capt. Mike Miller said. The B-1 weapon systems officer with the 28th Bomb Wing, Ellsworth Air Force Base, S.D., said speed and power are a must in today's battle space.

Plus, the bomber is a patient striker — a must for time-sensitive targeting. Just what allied forces need in Afghanistan,

he said.

“The B-1 can take off with no specific target and loiter over an area until the crew receives target information,” he said. “If someone needs a weapon on a target real fast, they just give us the coordinates, and we’ll drop weapons there.”

In the mountain hideouts of Afghanistan, Taliban and al Qaeda fighters learned about the Lancer’s pinpoint accuracy first-hand. After flying from a deployed location, one of the bombers could drop 24 global positioning system-guided joint direct attack munitions. Flights like these, dropping 2,000-pound dumb-turned-smart bombs, took most of the fight out of the enemy [See “Not So Dumb Bomb,” June 2001].

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And though critics still sometimes malign the dark-gray Lancer, the crews who fly and maintain the bomber — and swear by it — say they’re more than getting the job done. Their bomber has proven its worth in the war on terrorism. “We can take our mission anywhere in the world — and we’ve proven that,” Miller said.

In 1999, for example, Ellsworth crews deployed to Royal Air Force Fairford, England, and flew some 100 bombing missions against Serbian targets.

Besides Ellsworth’s 28th Bomb Wing, there are Lancers on duty with the 7th Bomb Wing at Dyess Air Force Base, Texas. The consolidation of the B-1 fleet removed aircraft from Mountain Home Air Force Base, Idaho, and two Air National Guard units in Kansas and Georgia.



Key mission

The bottom-line mission has been the same since the bomber joined the inventory at Dyess in the mid-1980s. Simply, Lancer crews say, the bomber provides rapid, decisive, massive and sustainable combat air power anytime, anyplace — at a moment’s notice.

Up from the Sea

The 28th Bomb Wing and its fleet of B-1 Lancer bombers can provide rapid, decisive, sustainable combat air power around the globe. A 37th Bomb Squadron B-1 taxis for takeoff on a training mission.

And with the advent of the joint direct attack munition, the bomber is even more effective, said Maj. Ted Presley, a B-1 aircraft commander at Ellsworth’s 37th Bomb Squadron.

“Rather than use 10 fighters that can drop only a limited number of bombs, one

B-1 can loiter over a target for hours and drop 48,000 pounds of bombs — wherever they need to be dropped,” he said.

Presley said Lancers can drop bombs within a few feet of a target. To get that kind of accuracy takes more than a well-trained crew. It takes a whole team of specially trained people. For operations in Afghanistan, the bomber crew works closely with ground controllers and special operations forces.

“All we need is someone on the ground to radio us the coordinates, and we’ll put the bombs there,” he said.

Presley said the Lancer does the rest. Despite the millions of dollars worth of equipment on board, the aircraft doesn’t behave like a big bomber.

“The plane is an aerodynamic marvel,” Presley said. “It maneuvers better than any other aircraft its size.”

Band of Gypsies

Miller likes the ride, too. “The part I enjoy most is when we fly low-attitude missions.”

Both men agree the Lancer’s grandfather — the venerable B-52 Stratofortress — and its next-generation cousin, the B-2 Spirit, are totally effective. But they’re nowhere as pretty, Miller said with a smile.

“If you’re looking for power, speed, accuracy — and sex appeal — the Lancer is the plane you call on,” Miller said.

Keeping the bomber fit and trim is the job of countless maintainers. Nowhere is that put to the test more than at Ellsworth, where the winter chill is enough to freeze a person’s thoughts. And on the flight line, the wind makes the cold arctic-like.



“You learn to layer your clothes,” said Senior Airman Philip Knight, a weapons load team member with the 77th Bomb Squadron.

“It takes a mind-over-matter mentality to load those bombers,” he said. And when it gets too much to bear, Knight drops on the line and does push-ups to keep warm.

Riffe (right) and Staff Sgt. Rob Rogalski position and pin a 2,000-pound JDAM inside the Lancer's cavernous weapons bay. Both airmen are weapons loaders with Ellsworth's 77th Bomb Squadron. The aircraft can carry up to 24 of the bombs at a time.

That kind of dedication to their aircraft doesn't go unnoticed by the aircrew, said weapons systems officer Capt. Fran Miller.

"Without our maintainers, we'd never get off the ground," he said. "They're the best in the world."

Honor with Dignity

Experience counts

Even before they delivered the message in Afghanistan of America's resolve to end terrorism, Ellsworth Lancer units were the most seasoned in the Air Force, Presley said.

Ellsworth aircrew members fly at least 12 simulator sessions, plus more than 240 hours of actual flying annually.

Because of the bomber experience level across the Air Force, Presley said customers can count on the B-1 getting the job done, anywhere.

And there are no longer surprises associated with the bomber. Though there were growing pains and initial criticism and skepticism of the airplane's capabilities, when called to perform, the bomber has been "hugely successful," Presley said.

"It took years for the Lancer to transition from a nuclear to conventional bomber," he said. "Now the B-1 has broken through the glass ceiling."

That all started with the bomber's performance in Operation Desert Fox. That was its coming out ball, Presley said. Then Operations Allied Force and Enduring Freedom ended the Lancer's rap as a "fair-weather" bomber, he said.

Hope on the Scope

Part of the bomber's success has been its ability to deliver the joint direct attack munition. It's a job it has completed at a neat 97 percent success rate.

That's bad news for the bad guys, Presley said.



But the Lancer, for all its technology, is getting old. The main issue facing the bomber today, Presley said, is that the jet is expensive, lacks spare parts and already needs upgrades to continue doing its duty in the coming decades.

Keeping Ellsworth's B-1 Lancers in "The lack of parts is probably the most

the air is the job of crew chiefs and specialists with the wing's myriad of maintenance squadrons. "Without our maintainers, we'd never take off or snoop out complicated enemy tracking systems," said weapons systems officer Capt. Fran Miller. "We have the best maintainers in the world."

challenging aspect of working on the aircraft," said Airman 1st Class Sam Widdifield, a maintainer with the 77th Bomb Squadron.

The airman said it's frustrating not putting a plane in the air for lack of parts. He said it's not uncommon "that we go looking for parts every two weeks." And as the bomber sits on the line, it's not doing its job.

"We know it's a reliable bomber — when we have the spare parts," he said.

Change is coming

But change is in the air.

Second Wind

Three years ago, Ellsworth B-1s were the first to get the "Block D" upgrades. That's the foundation for the joint direct attack munition. The global positioning system-guided 2,000-pound bomb gives the aircraft a reasonable stand-off distance from hostile targets.

Block D also includes an added feature — a towed decoy to deceive anti-aircraft missiles.

Still the Defense Department plans to cut the Lancer fleet from 90 to 60. However, Ellsworth's wing won't lose any aircraft and will continue to fly and maintain 26.

Savings from the reductions will help pay for upgrades. Planes that are retired will be used as spare parts stores for the remaining fleet.

That's fine with maintainers such as Staff Sgt. Ruben Bonales, also with the 77th Bomb Squadron. He'll have more parts to repair more aircraft. "That's going to be a good thing for us," he said.

Down the line, Block E upgrades will make the bomber even more effective. Those will include a new computer system that will allow it to launch different kinds of munitions from each of its bomb bays. The operational testing of this system should kick off this summer.

The Contenders

The Block E upgrades will also allow the Lancer to carry two new weapons. One is the joint stand-off weapon — a precision-guided cluster bomb. The other is the joint attack stand-off missile — a cruise missile.